DOCUMENT RESUME

ED 319 828 UD 027 415

AUTHOR Rong, Xue Lan; Grant, Linda
TITLE Ethnicity, Immigrant Generation Status, and School Attainment of Asians, Hispanics and Non-Hispanic Whites.
PUB DATE Apr 90
NOTE 52p.; Paper presented at the Annual Meeting of the American Educational Research Association (Boston, MA, April 16-20, 1990).
AVAILABLE FROM Xue Lan Rong, University of Georgia, Q308 Rogers Road, Athens, GA 30605.
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Asian Americans; Cross Sectional Studies; Demography; *Educational Attainment; Elementary Secondary Education; Ethnicity; Higher Education; Hispanic Americans; *Immigrants; *Indigenous Populations; *Minority Group Children; *Parent Background; *Racial Differences; Whites
IDENTIFIERS *Place Of Birth

ABSTRACT

A cross sectional study of the effects of ethnicity and immigrant generation status on the educational attainment of Asian, Hispanic, and White youth clearly indicates that generation of residence affects educational attainment, but that the effects are not wholly consistent across generation and ethnicity. The following immigrant generational groups are examined: (1) immigrants (defined as those born in foreign countries of non-American parents); (2) children of immigrants (American-born with one or more foreign-born parent); and (3) natives (American-born of American-born parents). Statistical data were analyzed from a sample of 22,695 youth aged 14 to 24 drawn from the 1979 Current Population Survey comprised of 91 percent Whites, 1.7 percent Asians, and 7.4 percent Hispanics. The following general patterns were observed: (1) children of immigrants attain more years of schooling than do immigrants; (2) attainment for Whites declines in the native as compared with the children of immigrant generations; (3) attainment for Asians appears to peak in the children of immigrant generation and to level off after that; (4) attainment for Hispanics increases with each generation, though gains slow down after the children of immigrant generation; and (4) Asians have the highest mean years of schooling attained and Hispanics have the lowest. None of the existing theories that attempt to explain the effects of immigrant status on school attainment provide a close fit with the findings of this analysis and further research is suggested to analyze what personal qualities, motivational factors, and social circumstances lead to high attainment for each group. A list of 74 references and statistical data on 4 graphs and 5 tables are appended. (FMW)

ED319828

Ethnicity, Immigrant Generation Status, and School Attainment of Asians, Hispanics and Non-Hispanic Whites

by

Xue Lan Rong
Educational Research Laboratory
College of Education
The University of Georgia
Athens, Georgia 30602

and

Linda Grant
Department of Sociology
and
Institute for Behavioral Research
The University of Georgia
Athens, Georgia 30602

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Xue Lan Rong
Univ of Georgia

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper Prepared for presentation at the American Educational Research Association meeting, Boston, Massachusetts, April 1990.

We appreciate advice on data analysis from Tim Futing Liao and Patrick M. Horan.

UD 027-415

BEST COPY AVAILABLE

Introduction

The United States currently is experiencing a dramatic new wave of immigration. Since the late 1970s about one million immigrants each year have entered the country. In 1987, 602,000 people immigrated legally to the U.S. (U.S. Bureau of the Census, 1989). In addition, between 300,000 and 500,000 illegal immigrants enter the U.S. annually (Passel & Karen, 1984). The total of legal and illegal immigrants is 879,000, approximately equal to the number of immigrants who arrived in 1910, the peak year of immigration in U.S. history. Hispanic and Asian immigrants now comprise the major components of legal immigrants (about 40% for each), and thus these the majority of immigrant children in U.S. public schools are members of these groups (Bennett & LeCompte, 1990; McKenna & Ortiz, 1988; U.S. Department of Education, 1988).

These two immigrant groups have shown markedly different levels of attainment and achievement in American schools. Asian students have on the average excelled in schools, surpassing the performance of all other ethnic groups, including native-born caucasians (Glazer, 1977; Hirschman & Wong, 1986; Kan & Liu, 1986; Lee & Rong, 1988). Even relatively recent Asian immigrants appear to perform well in schools compared with other groups (Gibson, 1988; Rong & Grant, 1990), provoking backlash in some areas of the country and restrictive quotas on Asian enrollment in some elite American universities (Hacker, 1989; Hassan, 1987; Wang, 1988).

In contrast, Hispanic students have performed less well (Matute-Bianchi, 1986; Orfield, 1986). There are variations among Hispanic students, with those of Cuban and Latin American descent performing better than those of Mexican American or Puerto Rican descent (Davis, Haub, &

Willette, 1983; Pedraza-Bailey, 1985; Suarez-Orozco, 1987a, 1987b; Valverde, 1987). Overall, however, Hispanic students show lower achievement rates, higher dropout rates, higher retention rates, and less satisfaction with school in comparison with non-Hispanic whites (Arias, 1986; Fernandez & Velez, 1985; Pedraza-Bailey, 1985; Rong & Goetz, 1990; Velez, 1988, 1989).

A shortcoming in much research on academic performance of Asian and Hispanics is a failure to separate out for each of these groups school children who themselves are immigrants, those who born in the U.S. of immigrant parents, and those of identifiable ethnic descent born in the U.S. of U.S.-born parents (Cohen, 1970; Steinberg, Blinde & Chan, 1984). Failure to make these distinctions confounds effects of ethnicity and generational status. Ethnic groups might differ in distributions of students across generational groups, and that might account for school performance differences between them. Furthermore, generational effects might differ across ethnic group.

Another limitation in much research is a lack of attention to attainment of ethnic by generation subgroups at varying levels of the educational system. Many studies have examined only total years of schooling or attainment at certain levels of the educational system (e.g., completion of high school) and thus cannot address whether variations among subgroups are relatively uniform across all levels of education or divergent by educational level.

These shortcomings make unavailable reliable baseline data on the performance of various subgroups and complicate the search for theoretical explanations of why certain students progress more rapidly than others.

This paper seeks to overcome some of these limitations by examining effects of ethnicity and generation, using a unique data base collected by the U.S. Census Bureau in 1979 and published in 1981 that allows clear separation of school-aged youth into three generations of U.S. residence. The 1981 data, described more fully below, are the only census survey in which birthplaces of individuals and of their parents were recorded. More recent data collections have omitted questions about parental birthplace.

Before outlining our analyses in detail, we review prior research on immigration and attainment in U.S. schools and on ways in which this might be affected by generational status, and ethnicity. As will become clear, few studies have examined the combined and simultaneous effects of these three factors, and the failure to separate them in part accounts for contradictory findings.

Studies of Immigrant Attainment

Early studies of schooling experiences of immigrants suggested that immigrants performed more poorly in schools than native-born caucasian youth (Cohen, 1970). However, most early studies failed to separate children who were immigrants from American-born children with one or more immigrant parent. This proved to be a critical distinction. Later studies suggested that while children who were immigrants had mixed records of attainment and achievement in schools, American-born children of immigrant parents usually outperformed native-born caucasians with native-born parents (Rong, 1988; Rong & Grant, 1990; Lieberson, 1980). Related research also showed that children of immigrants did well, usually superior to native-born caucasians with no recent immigration history, in

the economic system (Moore, 1981; Lee & Rong, 1988; Lieberson, 1980; Rong, 1988; U.S. Bureau of Census, 1953).

Although this finding was clear and replicated by many researchers in various historical eras, it often was met by disbelief by researchers and educators. For example, in 1906, Hill, working for the U.S. Census bureau, found a much lower rate of illiteracy for children of immigrants than for native-born caucasians with U.S. born parents. Hill speculated that his findings resulted from larger proportions of immigrants' than native-born parents' children in urban schools. Even though his later studies found that rural/urban residence differences could not account for differences in illiteracy rates, he nevertheless concluded that his findings reflected deficiencies in the data rather than lower illiteracy rates among immigrants.

Until recently few studies compared performances of children of immigrants from different ethnic groups (see, e.g., Cohen 1970). It is possible that various ethnic groups exhibited cultural values or unique histories that differentially prepared them for attainment in American schools. Or it is possible that various group entered the country at different times and places and therefore faced unequal opportunities for educational attainment and economic mobility. Most studies obliterated these potential effects by focusing on a single ethnic group or lumping together persons of various ethnic groups and comparing them to native-born whites and/or native-born blacks (Lieberson, 1980; Model, 1988). Ethnicity and generational status might interact, producing unique subgroup effects. This issue has not been researched. Additionally, immigration generation effects might be consistent across all levels of

educational attainment (completion of grammar school, high school graduation, college graduation) or generation effects might vary in magnitude at each educational level.

Focus of This Study

This paper addresses questions not fully explored in prior research. In particular, we sort out the combined effects of generational status, and ethnicity on years of schooling attained by youth ages 14-24. We examine the effects of these factors on attainment of youth at three levels of the educational system: completion of grammar school, completion of high school, and attainment of a bachelor's degree. Our analyses are based on data collected by the U.S. Census bureau in November 1979 (U.S. Bureau of Census 1981) from a representative sample of 160,255 people of varying ethnicity aged 14 and over. Unlike the aggregate Census data collected and published at ten year intervals for the entire U.S. population, these data are a representative sample of about .1 percent of the U.S. population over age 13. In contrast to the aggregate census data, these data are reported at the individual level. As noted previously, this sample is the only one to include information on birthplace of both parents. None of the other equivalent samples after 1970 (including the planned 1990 replication) include these data. Therefore, the 1979 data constitute the only available data permitting clear identification of three generational groups: immigrants, children of immigrants, and individuals of varying ethnic identities with no recent history of immigration.

We refer to youth who were born in foreign countries of non-U.S. parents but later immigrated to the U.S. as <u>immigrants</u>. American-born

students with one or more non-U.S.-born parent are called children of immigrants. (Demographers typically refer to this group as second-generation immigrants.) Students born in the U.S. whose parents also are U.S.-born are referred to as U.S. natives. It is important to stress that we are making cross-sectional comparisons. We do not use generation in the same manner as the term might be employed in longitudinal research tracing successive generations of individuals related by blood, marriage, or adoption. Rather, we classify persons based on their generation of residence in the United States. Most prior studies of educational attainment using census data examined attainment of persons over age 25 (see, e.g., Neidert & Farley, 1985). Instead, we focus on attainment among persons ages 14-24, those most likely to be enrolled in school or to have recently completed their schooling. Comparisons of adults over age 25 tell us little about whether schooling was attained in the U.S. or elsewhere. Since they involve persons of many birth and immigrant cohorts, they are not as directly applicable to the situation now facing public schools with large influxes of immigrant youth as are data on persons who are of school age. Because some of the students in our sample are still in schools, in examining years of schooling attained we introduce controls for age, explained in greater detail below.

Central Questions

This paper addresses three central questions:

(1) Does immigration generation (immigrant, child of immigrant, or native) affect educational attainment of white, Hispanic and Asian youth?

(2) Are generation effects similar or dissimilar across the three ethnic groups used in our comparisons?

(3) Are generational effects, ethnicity effects, and generation-by-ethnicity effects on attainment similar or dissimilar at various levels of the educational system, specifically completion of grammar school, high school, and four years of college?

We first examine effects of these statuses in combination in years of schooling attained, controlling for youth's age. We then examine effects of these statuses at three thresholds of educational attainment: grammar school completion, high school completion, and completion of four years of college.

Data and Sample

As noted above, the data for this study are drawn from Current Population Survey, an interview conducted in November 1979 by the Bureau of the Census for the Bureau of Labor Statistics. These data became available on machine readable public-use data tapes in 1981. The sample was a multistage probability sample of the civilian noninstitutionalized U.S. population living in households. The sample included approximately 76,700 households that contained 160,255 interviewed persons 14 years old and over.[1] Information is available on one's birthplace, birthplaces of parents, years of schooling attained, and completion of grades and years of postsecondary schooling. Age, gender and ethnic status also were recorded for each respondent. Unfortunately, the dataset contains no information about parental education, family socioeconomic status, or parents' or youths' educational aspirations or motivations.

We focused on those respondents among the 160,255 who were aged 14 to 24. Of these, 22,695 were white, Hispanic, or Asian. Of these 91% were

non-Hispanic white, 1.7% were Asian and 7.4% were Hispanic. Hispanics included persons of various racial groups who traced their ancestry to Spanish-speaking countries. Persons of Afro-American and "other" ancestry were omitted because there were few immigrants or children of immigrants in the sample from these groups (only 52 black youth immigrants). Small numbers for blacks did not allow the statistical comparisons used in this study for that group. We explored gender effects within each generation and ethnic group but found no statistically significant gender effects. Therefore, analyses reported here combine males and females.

TABLE 1 ABOUT HERE

Table 1 shows characteristics of the sample. The table reveals that the generational status composition differs in the three ethnic groups. Half of the Asian youth are foreign-born and another quarter are children of foreign-born parents.[2] The other groups have lower proportions of youth in these two generations.

Methods

We first report means for age-adjusted years of schooling completed among youth ages 14-24 by generational status and ethnicity. Schooling completed is measured by respondents' report of the highest grade completed. We then present analyses of generation by ethnicity effects on attainment at three levels of education: completion of grammar school for youth 14-24, completion of high school for youth 16-24, and completion of four years of college for youth 20-24. We present the means or percentages for those four indicators of educational attainment with age-adjusted rates.[3] Age compositions of subgroups differ slightly, so means might be misleading without an age adjustment. Asian children of

immigrants, for example, are on the average about 1.3 years younger than Hispanic immigrant youth (Table 2).

TABLE 2 ABOUT HERE

We then report results of ordinary-least-squares multiple regression analyses of the combined effects of generational status and ethnicity on years of schooling attained, controlling for age. We use dummy variables to denote subgroup membership. The regressions provide contrasts of predictors of schooling attainment for three groups: white, Hispanic, and Asians. To examine attainment at each of two levels of education--grammar school and high school--we employ logistic regressions. Logistic regressions permit multivariate analyses with dichotomous or highly skewed dependent variables (Aldrich & Nelson, 1989; Hanushek & Jackson, 1977). Estimates of coefficients and tests of significance of parameters in logistic regressions are interpreted in a similar manner as ordinary least squares regressions. We could not complete regressions for the completion of college phase of education, since there were too few Asians in the sample overall, and too few Hispanics who had attained a college education, to permit meaningful multivariate analyses. In regressions generational status is indicated by a set of dummy variables, with children of immigrants coded as 0 and serving as the reference group.

Results

We first report descriptive data on attainment of each generation by ethnicity group and then move to results of regression analyses.

Schooling Years Attained

Students in the age ranges 14-24 are passing through various phases of the life cycle, each with a distinctive normative pattern of

educational attainment. Total years of school attained by a certain age can differ by progression (or lack of progression) at various phases of the educational career. Schooling attainment for a particular group can be reduced by retention, higher rates of dropping out of school, or postponement of higher education. If one ethnic group delays entry into postsecondary education more so than another, the delayed-entry group will show lower levels of school attainment on our age-adjusted measure, even if they ultimately obtain as much or more education as other student groups.

Table 3 presents means of years schooling attained for each of the three generation by ethnicity. Because the sample size is so large, we have not presented tests of statistical significance between means, since even very small differences will be significant with such a large sample. With no controls for generational status, Asian students show the highest average years completed, followed closely by whites. The largest discrepancy appears in years completed by Asians and by Hispanics, a gap of more than a year.

TABLE 3 ABOUT HERE

Patterns of attainment across generational status differ slightly for the three ethnic groups. These are apparent in the data reported in Table 3 and also in Figure A. For whites attainment variations across generations are small, but the highest levels are observed for children of immigrants, who attain on the average .3 more years of schooling than do natives. Thus, white attainment increases from the immigrant to the children of immigrant generation, but there is an actual decrease between children of immigrants and whites born in the U.S. with native-born

parents. This is consistent with findings of earlier research by us and by others (Lieberson, 1980; Rong, 1988; Rong & Grant, 1990) although the pattern may not be well known among educators and the public.

For Asians Figure A and Table 3 show that attainment increases markedly between immigrants and children of immigrants, but there is little difference between children of immigrants and American natives of Asian ancestry. Attainment appears to peak in the children of immigrant generation and level off after that. These data show that it is only with the children of immigrant generation and beyond that Asians' attainment outstrips that of other groups. In the immigrant group, contrary to some media reports, Asians do not attain quite as much schooling as do immigrant whites.

FIGURE A ABOUT HERE

For Hispanics the pattern differs from both whites and Asians. Although overall Hispanics have lower levels of attainment than either of the comparison groups in all generations, each successive generation of U.S. residence increases Hispanics' educational attainment (Figure A and Table 3). Hispanics are the only group showing notable improvement in attainment by native-born children in comparison with children of immigrants. The gains for Hispanics in the children of immigrant to native generation contrasts both to whites, for which there is a decline, and for Asians, for which there is a leveling off at this generational phase.

Grammar School Completion

Table 3 and Figure B show age-adjusted grammar school completion rates by ethnicity and generational status. For whites, grammar school

completion rates increase between immigrant and children of immigrant generations, but decline in the native generation. This pattern parallels the pattern already reported for whites for schooling years generally. For Asians and for Hispanics, there are large gains by children of immigrants compared with immigrants, but smaller gains for natives compared with children of immigrants. Asians have the highest attainment rates beyond the immigrant generation and Hispanics the lowest (Figure B). Asian grammar school completion rates, in fact, are 100 percent for natives.

FIGURE B ABOUT HERE

High School Completion

Table 3 and Figure C show age-adjusted high school completion rates by ethnicity and generation. Patterns closely parallel those for mean years of schooling for all groups. Whites increase from immigrant to children of immigrant generations, then decline in the next generation. Asian students increase completion rates in the immigrant to children of immigrant generation, but attainment levels are relatively steady between children of immigrant and native generations. Hispanic students increase attainment rates dramatically in each generation. As with grammar school completion rates, Asian students out-attain other groups and Hispanics are substantially lower in attainment rates at the high school level in all generations.

FIGURE C ABOUT HERE

Completion of Four Years of College

When we examine college completion, we encounter two problems. First, the sample size diminishes substantially (see Table 3). There are, for example, only 6 Hispanics and 4 Asians among children of immigrants who

completed college. Therefore, findings for Hispanics and Asians are very unstable in comparison with whites. Second, interpretation of effects on generation of residence on college completion is complicated by the fact that many students, and perhaps especially Asian students, immigrate primarily for purposes of obtaining a college education. These students may or may not become permanent residents. Patterns reported about college attainment must be regarded as speculative and not wholly comparable with data for attainment at other levels of the educational system where numbers in each cell used in the comparisons are larger.

Attainment rates of the subgroups for four years of college are shown in Table 3 and Figure D. Patterns for whites by generational status parallel those observed for other levels of education. Asians show highest levels of education for immigrants, probably the result of the previously-discussed immigration expressly for the purpose of postsecondary education. College completion rates are lower for children of immigrants but higher for native generation children of Asian ancestry. Asians out-attain whites in the immigrant and the native generations, but lag behind them in the children of immigrant generation. Hispanics, though substantially lower than white and Asians in all generations, here parallel cross-generational patterns of whites more so than those of Asians, a break for what has occurred at other levels of education. Hispanic attainment of four years of college increases between immigrant and children of immigrant generations, but decreases between children of immigrant and native generations.

FIGURE D ABOUT HERE

Predictors of Schooling Years Attained

To explore the combined effects of generational status and ethnicity on attainment of mean years of schooling, we performed ordinary least square multiple regressions separately for white, Hispanic and Asian. Regressions were performed separately for each group because of variations in sample size. Results of the three regressions are shown in Table 4. The independent variables account for between .19 and .52 of the explained variance in schooling years attained across the three subgroups, with highest explained variance obtained for whites and the lowest for Hispanics.

TABLE 4 ABOUT HERE

The analyses allowed tests of the differences in educational attainment with each successive generation of residence in the United States. Both unstandardized and standardized coefficients are reported in Table 4. We will first interpret the former, since they permit comparisons across equations. We should caution that the equations are based on different numbers of cases in each subgroup. Therefore, estimates are more stable for subgroups with large numbers of cases (whites) and less stable for those with small numbers of cases (Asians).

Considering first the effects of generational status, we find that for all ethnic groups, children of immigrants attain more schooling than immigrant generations. The effect is statistically significant for all generation by ethnicity subgroups. Comparisons of attainment of children of immigrants and natives within ethnic group show differences for fewer groups than did the comparisons between the first two generations. Effects are significant only for whites and Hispanics. Whites show a significant decline in attainment in the native as compared with the

children of immigrant generation. Hispanics show the opposite. Although there is a small downward trend in attainment for Asian, this trend do not reach statistical significance.

Magnitudes of the effects of generational status among subgroups can be compared only with caution. Caution is indicated because the size of each group, and hence the magnitude of the standard error, varies across equations. Unstandardized coefficients suggest that Hispanics show the greatest attainment gains between the immigrant and children of immigrant generation. The next largest gain in the immigrant to children of immigrant phase is for Asians. Whites also gain at this generational phase, but the magnitude is less than for the previously discussed groups.

In the next generational contrast, the magnitude of gain is smaller for each group. Positive coefficients approach significance only for Hispanics. In marked contrast, whites show a significant decline in attainment roughly equal to the improvement observed in Hispanics' attainment.

The standardized coefficients allow us to assess the relative magnitude of change within each ethnic group across generational groups. Standardization controls for variations in scale in each of the independent variables measured at different times. The coefficients show that change for most groups is greater between immigrant and children of immigrant generations than it is in the next successive generation. The coefficients suggest that for whites the magnitude of change is similar for each successive generation but the effect is opposite at each generation interval. Whites' attainment increases at the first phase, but decreases at the second. For Hispanics, the magnitude of change is

substantially greater in the immigrant to children of immigrant contrast than between the next two successive generations. For Asians the only statistically significant gain in attainment appears for the immigrant and children of immigrant contrast. The successive generation has no statistically significant effect on attainment.

Predictors of Attainment by Levels

To explore the combined effects of generational status and ethnicity on attainment, we performed logistic regressions separately for white, Hispanic and Asian at two levels of educational attainment: grammar school completion and high school completion.[4] Logistic regressions were needed because some dependent variables were highly skewed. Logistic regressions provide more reliable tests of statistical significance with dichotomous and skewed dependent variables. Significance levels of parameters are interpreted in the same manner as for ordinary least squares regressions. In each logistic regression the chi-square and p value indicate the goodness of fit of models. The sign of the coefficient indicates a positive or negative effect from the corresponding independent variable, and the t value (*) indicates whether the effect is significant. The size of the logistic regression coefficients also indicate the relative importance of these predictor variables, although magnitude of coefficients are not interpreted in precisely the same manner as in ordinary least squares regression since a logistic model assumes a nonlinear relationship between predictors and outcomes.

TABLE 5 ABOUT HERE

Predictors of attainment for each generation by ethnicity group closely parallel findings for predictors of schooling years generally

shown in Table 4. At levels of grammar school and high school completion for all ethnic groups, children of immigrants significantly outattain children in the immigrant generation (Table 5).

In the next generational contrast, the effects on the likelihood of completion of grammar school or high school are significant only for whites and Hispanics. Whites children of natives show a significant decline in completion rates as compared with the children of immigrants. Hispanic natives show a significant attainment increase compared with children of immigrants. Because there is a virtual 100 percent completion rate of grammar and high school for Asian natives, for this group no contrasts can be performed between this generation and subsequent ones. The probability difference of high school completion between Asians children of immigrants and natives is not statistically significant (Table 5).

Summary

Although the data we have presented are complex, general patterns can be observed. Generation of residence in the United States clearly affects educational attainment of students, but the effects are not wholly consistent across generation and ethnicity. It is very important to examine these contextual effects, although this rarely has been done in prior research.

For the contrasts between immigrants and children of immigrants, effects are fairly uniform for all subgroups examined in our analyses. Children of immigrants have significantly more years of schooling attained, with age adjusted, than do immigrants. The greatest increase at this generational phase occurs for Hispanics. For them being born in the

U.S., rather than being an immigrant, has the most powerful effect on attainment.

The effects of being natives with two America-born parents differ among whites, Hispanics, and Asians. For whites, attainment declines significantly between children of immigrant and native generations. For Asians, attainment appears to peak in the children of immigrant generation and level off after that. The declines observed for caucasians between the children of immigrant and native generations do not appear for Asians. For Hispanics, more generations of residence in the U.S. are linked to higher attainment, though the gains slow down somewhat after the children of the immigrant generation.

As a whole, Asian youth's educational attainment outpaces other groups'. The only exception occurs at lower levels of the educational system for immigrant children. This likely is a mixed group which varies considerably in age at arrival in the U.S. and language skills of students and families. Overall Asians have the highest proportion who finish grammar school, high school and four years of college and thus have the highest means on total years of schooling attained. Hispanics have the lowest. Hispanic youth did not do as well as either caucasians or Asians but they are moving up rapidly in attainment with increased generations of residence.

Interpretation

Interpretation of our findings is challenging in several respects. Many theories have been advanced to attempt to explain the effects of immigrant status on school attainment. Although many of these theories are consistent with some of our findings, none can provide a close fit

with all our results. Nearly all omit one or more variable that our findings show are important in predicting schooling attainment, and this is one obvious source of their limited applicability.

Limitations of Data

Before we consider theoretical and practical implications of our findings, it is important to note some limitations in our data and analyses. The census sample data unfortunately contain no information about attitudes or motivations or important human capital variables, such as past achievement or educational potentials of students. Nor do they contain information on parental education or socioeconomic status, which clearly are important correlates of educational attainment of students in all ethnic and generational groups. These are important components of many theories advanced to explain educational attainment, but their implications cannot be explored with these data.

Other important limitations result from the size of certain sample subpopulations. The Asian group, in particular, is very small at each generational phase, making estimates less stable. The small sample size also does not permit disaggregation into different intra-ethnic cultural subgroups. Research on the educational and economic progress of Asian immigrants shows diverse results across specific Asian groups, with Japanese-Americans doing extremely well and Hmong doing poorly (Bennett & LeCompte, 1990). Hispanics immigrants of Cuban descent have had more positive outcomes in schools and the labor market than have those of Mexican or Puerto Rican descent (Pedraza-Bailey, 1985). The fact that we found no significant gender effects conflicts with findings of other research suggesting these might exist for certain ethnic groups (Arias,

1986; Barringer, 1990; Del Castillo & Torres, 1988; McKenna & Ortiz, 1988). Small sample size in some categories used in our comparisons might in part have accounted for lack of significant gender effects. Further research with larger samples is needed to test for possible gender differences.

Given these limitations, it nevertheless is possible to assess our findings in relation to several theoretical explanations suggested to explain links between immigration and schooling achievement. Our interpretations must be speculative, since our data do not provide the measures of motivation and aspirations that many theories posit are the keys to understanding patterns of achievement by ethnicity and generational status.

Selection Effects

There is a possibility of selection effects in decisions to immigrate (Model, 1988). Families from various origins who decide to immigrate might be motivated specifically by opportunities for education and social mobility, if not for themselves then for their children. Thus, nonrefugee persons who become legal or illegal immigrants might be specifically motivated by opportunities for education. Advantages in education might come more to native-born children than to immigrants, however, since the first generation might be hampered by language limitations and socioeconomic constraints, for example, the need for older children to drop out of school prematurely to help families with finances.

Demographic studies confirm that immigrants tend to arrive in the U.S. in their twenties and thirties when they are physically vigorous and at the prime of their working lives (Simon 1985). Many held high-status

jobs and were highly educated in their native countries, compared with nonimmigrants, before their arrival (Gupta 1985; Wong 1986). This might give this group competitive advantages in the labor force and in education. These studies also show that immigrant families, compared with natives, have more stable families.

Other writers have hypothesized that immigrants have certain psychological characteristics that distinguish them from others and advantage them in educational and social mobility. Wolfle (1971) contends that persons moving long distances are more adventurous and risk-taking than non-immigrants.

There is a large body of literature suggesting that many ethnic groups historically and presently invest a great deal in keeping children in school (Garcia, 1989; Gibson, 1988; Kallarackal and Herbert, 1976; Ravitz, 1974; Suarez-Orozco, 1987a). Kallarackal and Herbert (1976) found that many foreign-born parents sacrifice for their children's education, maintain close ties and mutual support among family, enforce discipline, and press children to high achievement. Suarez-Orozco (1987a) found that central American students work hard in school and consider high achievement a reward owed to parents, who take jobs as janitors, maids, and busboys to ensure that their children get educations they never had. Similarly, Gibson (1988) shows that Sikh immigrant students believe they must work hard and achieve well in school to please parents and compensate for their sacrifices.

These explanations cannot be tested with census data, since there are no measures of students' or parents' aspirations or motivations. They also appear inconsistent with patterns of attainment among newly-arrived

Asian students, many of whom are impoverished refugees upon arrival in the U.S. These students nevertheless perform extraordinarily well in schools (Bennett & LeCompte, 1990). However, a full testing of these explanations requires more data collection including psychological and attitudinal variables among students and their parents in various generational and ethnic groups.

Socioeconomic Factors

Some theories argue that for immigrants and natives alike, school attainment is merely a proxy for socioeconomic status of families. These theories assume that children take in the educational-related values of their families, which are strongly linked to social class. North (1979) and Chiswick (1979), who use 1970 census data, find that earnings of the foreign-born in the labor force initially are less than those of the native-born population. However, the difference diminishes over time. After a time lag of 10 to 15 years, earnings of the foreign-born exceed those of the native-born. Historically many immigrant groups have found particular niches in the U.S. economy that have allowed rapid socioeconomic advancement (Bonacich, 1973). Differences in socioeconomic attainment are related to educational values and aspirations of children, and to high attainment of children of immigrants whose parents presumably have become prosperous in the U.S.

Our data also do not speak directly to these theories. Some prior research suggesting intra-ethnic differences in performance, for example, Pedraza-Bailey's (1985) comparisons of Cuban and Chicano immigrants and their children, are consistent with such explanations. However, once

again, such explanations cannot explain the extraordinarily high attainment among even impoverished refugee groups.

Cultural Difference Theories

Cultural difference theories are popular approaches to explaining ethnic differences in attainment. These approaches have been applied especially to analyses of the extraordinarily high attainment of Asian students in comparison with other groups. Cultural difference theories emphasize variations among family life and cultural traditions among ethnic groups. Many writers have pointed to aspects of Asians' culture (high proportions of intact families; valuation of academic work; avoidance of teenage dating; culturally and religiously-based emphasis on effort and persistence) as influential in explaining the extraordinary success of Asian students in school.

In-progress research by Dornbusch (Quoted in Butterfield, 1990) finds that Asian students do not have higher IQ's than other groups, but devote substantially more time to school work than counterparts of other ethnic groups. Asian parents tend to believe that school success and outstanding achievement reflect effort (Stevenson, 1988), while American parents more typically attribute these outcomes to talent. Chen and Stevenson (1989) find that Asian students devote substantially more hours to homework than do white students, who in turn spend more time on homework than do blacks and Hispanics.

Some of these patterns might be attributable to family influence, but we must be cautious because some might also reflect other differences. Time spent on homework, for example, might be related to curriculum track as well as student motivation or parental influence. Students in higher

tracks are assigned more homework. We cannot examine these effects fully with census data, but these are important topics to be addressed in future research.

Our findings are partially consistent with these arguments. The patterns of peak attainment for children of immigrants among whites but a decline thereafter might result from more rapid assimilation of whites than other ethnic groups, but assimilation to a less attainment-oriented culture than that maintained by immigrant parents. These theories do not, however, appear to account well for attainment differences between Asians and Hispanics, since recent research shows that Hispanic parents as well as Asian parents hold high attainment aspirations for their children (Garcia, 1989; McKenna & Ortiz, 1988; So, 1987). Nor do they concur with media accounts of immigrant students who show superior attainment in schools even when they immigrate without other members of their family (Butterfield 1990).

There are inconsistencies in our findings and cultural difference theories, however. These theories cannot account for the continued upward trend in attainment of Hispanic students, despite fewer hours invested in homework. They also are inconsistent with studies showing that Hispanic parents, like Asian and black parents, have very high educational aspirations for the educational attainment of their children and strongly believe that education is a route to social and economic mobility (Lee, 1988). Hispanic students might be less able to invest time in homework because of competing duties (e.g., the need to perform waged or domestic labor), not because of a less positive orientations toward education by them or their parents.

Other theories stress assimilation/Americanization as a precondition of educational attainment. Increased attainment with increased generations of residence for Asians and Hispanics appears to be consistent with an argument that greater assimilation, presumably an outcome of more generations of residence, aids attainment. However, this theory does not explain why attainment decreases in the last generation we studied among caucasians. Nor does it wholly account for why the pace of attainment slows in among natives compared with children of immigrants. While there is substantial support for a conclusion that assimilation, especially good English-language skills among students and their parents improves attainment, some studies suggest that too much assimilation of ethnic groups actually reduces high-attainment goals of immigrant students (Butterfield, 1990). Gibson (1988) finds, for example, find that Sikh Indian immigrant parents discourage social contacts between their children and American youth lest the latter discourage family commitment and devotion to school work valued by the Sikh parents. Dornbusch (Quoted in Butterfield 1990) finds that students from families with good English-language skills show lesser school attainment and achievement in comparison with youth from families with poorer language skills, a pattern consistent with Gibson's findings. First-person accounts of recent immigrants suggest that some devote extraordinary hours to school work because they encounter discrimination and isolation in other domains of social life (Nhiem & Halpern, 1989; Roos & Hennessey, 1987). This clearly is a complicated issue, deserving much more critical research.

Secondary Discontinuity Theories

Ogbu (1987a, 1987b) proposes a secondary discontinuity theory that stresses the contrasts between immigrants' educational and social mobility options in their country of origin with those in the U.S. Ogbu argues that when immigrant groups perceive greater mobility options via education in the U.S. than in their countries of origins, attainment in the children of immigrant generation will be high. When attainment is thwarted, as it is in many oppressed groups (such as blacks and Hispanics), attainment will be lower. In the latter case, parents may express to their students ambivalence about educational attainment. Although parents express a desire for their children to attain, they also anticipate discrimination in schools and do not judge children negatively when they fail to attain.

Important in Ogbu's explanations (1978, 1988) are an ethnic group's history of entry into the United States and its relationships to powerful groups. He makes a distinction between immigrants and what he terms "castelike" minorities. Immigrants are those who voluntarily choose to come to the United States. He includes in this group political refugees, though others have taken issue with this classification (D'Amato, 1987). Castelike minorities are those whose members have been forcibly brought to the United States in an explicitly subordinant relationship to natives. Ogbu classifies most Asian immigrants into the first group and many Hispanics (and also blacks) into the second.

The reference groups relative for judgments about one's status are central to Ogbu's theories. Ogbu cites Shibutani and Kwan (1965) in support of his argument that immigrant children see their inferior social status in the host country as reflective of their temporary status as newcomers. Others view menial positions in America as an improvement over

conditions in their homeland prior to immigration. Many immigrants take as their reference groups persons still in the home country or other members of U.S. immigrant communities, not members of the dominant ethnic and class groups in America. Thus, immigrants measure success, failure, and self-worth relative to standards of their homelands. Gibson (1988) finds support for Ogbu's claims that own ethnic group members, not dominants in the host society, are the reference groups for recent immigrants, at least initially.

An important difference in the power status of Asians and Hispanics in the United States might result from the fact that larger proportions of Hispanics than Asians in the past have been illegal immigrants. The legal and political status of immigrant families is a major disadvantage. Seventy-five percent of illegal immigrants into the U.S. have Latin American country origins, with half of them from Mexico alone (Rist, 1987). These groups often face public hostility, as revealed by attitudinal polls (Harwood, 1986). In Texas and Florida, where proportions of legal and illegal Hispanic immigrants have been high, there have been explicit attempts to bar children of illegal immigrants from public schools (Chaze, 1985; Flores, 1984). Some of this pressure was reduced by a recent Supreme Court ruling barring school officials from asking about citizenship status. Nevertheless, hostility and past attempts to limit access to education might inspire fear in parents and children. Living with packed suitcases and concealed identification makes the educational attainment of children difficult.

The castelike minorities may be more mistrusting of schools run by an oppressive majority group. Castelike groups tend to obtain less social

mobility in return for school attainment, because their progress is blocked by institutional discrimination. Therefore, over time students from these groups and their parents come to question the value of schooling as a means of social mobility, giving students ambivalent messages about the value of attainment.

This argument shows some similarities with analyses by Willis (1977) of class differences in attainment in British schools. British schools show more overt class distinctions than do those of the U.S. Willis argues that working-class males devalue education because they (and their parents) have learned that education will not pay off in terms of social mobility for most working-class youth. Immigrant groups, whose parents are more naive about the relationship between schooling and job status in Great Britain, do not develop the explicitly anti-intellectual orientation of Willis's "working class lads" because they do believe that success at school insures social mobility (see, e.g., Furlong, 1984). Willis's argument is consistent with the data for caucasian youth in the U.S., but inconsistent with data for other ethnic groups, unless one were to argue that the expectation of links between education and social mobility is maintained for more than one generation. Asian youth also have done well in the labor market (see Lee & Rong, 1988), although recent work suggests that they get somewhat less payoff in terms of salary than comparably educated white youth (Barringer et al., 1990; Tienda & Lii, 1987).

Ogbu's and Willis's are consistent with some aspects of our findings, for example the gaps at each generation between attainment of Asians and Hispanics. Only these theories offer a rationale for the decline in attainment of whites in the native generation. However, other components

of our findings are inconsistent with these explanations. D'Amato (1987), among others, has criticized Ogbu's theory for failure to account for success of disadvantaged groups. The continued improvement of Hispanic students is inconsistent with his argument. Furthermore, historical evidence (e.g., Garcia, 1989) challenges an interpretation that Hispanic immigrants were mistrusting or resistant to education. Garcia's study of San Antonio quotes written and spoken words of Hispanic leaders who advocated better schools for Hispanic youth and who clearly expressed beliefs about the efficacy of education. More recent data (Lee, 1988; McKenna & Ortiz, 1988) show that Hispanic parents hold high educational aspirations for offspring.

Also, not all studies of relationships between education and labor market position are consistent with the tenets of Ogbu's theory. A recent study by Barringer and associates (1990) demonstrates that Asians of both genders have labor market experiences similar to those of white females. That is, they parallel job categories occupied by white men, are somewhat overeducated in comparison with white men for the positions they hold, and earn less relative to white men when job categories and experiences are controlled. Ogbu's theory would predict under these circumstances that Asians would become discouraged about educational attainment, since they do not appear to receive equitable payoff in the labor market for their educational attainment. Our data suggest more leveling off of educational attainment in the native generation among Asian and Hispanic men, although this trend is not significant in the multivariate analyses. The trend bears watching, however. It is possible that attainment for males in

these groups will decline if equitable payoffs in the labor market are not attained.

Finally, socioeconomic status compositional differences in generational and ethnic groups--something that cannot be measured in these data--undoubtedly account for much variation in schooling attained. Studies of differences in attainment within Hispanic (Pedraza-Bailey, 1985) and Asian (Hirschman & Wong, 1987) national groups in U.S. schools denote the importance of this variable. Attainment likely also is linked to economic opportunities available to groups at the time they arrived in the U.S., since these affect opportunities to obtain high-quality schooling for one's children if not for oneself (Lee & Rong, 1988). However, some recent studies do not find strong links between socioeconomic status and attainment of Asian students (Chen & Stevenson, 1987), and popular media continually report stories of outstanding schooling success for Asian students, in particular, who are recent immigrants with few economic resources (Butterfield, 1990).

In sum, we argue that there exist no theory that adequately explains effects of generation and ethnicity on school attainment. There is an urgent need for more detailed, more contextual research that recognizes from the outset that the processes leading to school attainment probably differ for various population subgroups. Future research needs to analyze in greater detail what personal qualities, motivational factors, and social circumstances lead to high attainment for each group. There needs to be much greater effort to theorize how ethnicity influence the attainment of each generational group.

Practitioners need to recognize that the roots of high attainment may vary substantially across subgroups. There also might be local variations in attainment patterns of ethnic by generational groups that result from opportunities and discrimination in local communities. Practitioners should be alert to our findings that certain groups move up more rapidly than others, for example Asians in comparison with Hispanics. It is important to note that despite the slower pace of increased attainment, Hispanics continue to move up in the American educational system. There might be programs that schools could innovate to accelerate the pace of increased attainment of Hispanics.

Practitioners also need to remain cognizant of the fact that high attainment in schooling is not the only measure of positive schooling experiences for immigrant and children of immigrant ethnic groups. Some studies suggest that despite high and improving achievement, these students continue to experience social discrimination and isolation in schools, a setting in which they spend numerous hours growing up. There is a need for further attention to experiences of these groups in schools that move beyond questions of achievement and attainment.

Finally, practitioners need to be alert to another issue that is becoming increasingly evident but has not always been forthrightly addressed in educational policy: backlash against high achieving ethnic groups, particularly Asians. This question has arisen thus far mostly at the level of postsecondary education, but controversy occasionally has occurred at other levels of the educational system. Practitioners need to give more thought to how cultural diversity can a source of enrichment rather than divisiveness in schools and communities.

1. Details about sample design, survey procedures, and sample error can be found in Current population survey, November 1979, tape technical documentation, Washington, D.C.: U.S. Government Printing Office, 1981, GPO Stock Number 003-024-01490-4.

2. As Rong & Goetz (1988) report, for some Asian nationalities the proportions of youth who either are immigrants or children of immigrants is extremely high. For Chinese the proportion is 91 percent; for Koreans it is 95%; and for Filipinos it is 96%. Although variation among Asians by country of origin undoubtedly exists, the small proportions of Asians in the total sample do not permit us to make the breakdowns that would probe these variations.

3. The age-adjusted rate may be expressed as:

$[(E_a/P_a)*P_{sa} \times 100]/Ps$ where E_a=High school graduates in age group
P_a=population in age group a
P_{sa}=standard population in age groups
P_s=Total standard population

The standard population is the total population of White, Hispanics and Asians for age 14-24 years old.

4. Logistic regressions for completion of college could be performed only for whites of various immigrant groups, because there were too few Asians in the sample and too few Hispanics completing college to allow meaningful multivariate analyses. For whites, there was a significant effect of being a child of an immigrant versus an immigrant oneself on college completion (b=-.48). However, there was a significant negative effect of being a native in comparison with a child of an immigrant (b=-.37).

REFERENCES

Aldrich, J.H., & Nelson, F.D. (1989). Linear probability, logit, and probit models. Newbuty Park, California: Sage Publications, Inc.

Arias, B. (1986). The context of education for Hispanic students: An overview. American Journal of Education, 95, 26-57.

Barringer, H.R., Takeuchi, D.T., & Xenos, P. (1990). Education, occupational prestige, and income of Asian Americans. Sociology of Education, 63, 27-43.

Bennett, K.P., & LeCompte, M.D. (1990). How Schools Work: A Sociological Analysis of Education. New York: Longman.

Bonacich, E. (1973). A theory of middlemen minorities. American Sociological Review, 38, 583-94.

Butterfield, F. (Jan 21, 1990). Why they excel. Parade.

Chaze, W. (1985). Invasion from Mexico: It just keeps growing. In S. Anzovin (Ed.). The problem of immigration. New York: The H.W. Wilson Company.

Chen, C.S., & Stevenson, H. (1989). Homework: A cross-cultural comparison. Child Development, 60, 551-561.

Chiswick, B. (1979). The economic progress of immigrants: Some apparently universal patterns. In W. Paulker(Ed.). Contemporary Economic Problems, 357-399. Washington, DC: American Enterprise Institute.

Cohen, D. (1970). Immigrants and the schools. Review of Educational Research, 40(1),13-27.

D'Amato, J. (1987). The belly of the beast: On cultural differences, castelike status, and the politics of school. Anthropology and Education Quarterly, 18, 357-64.

Davis, C., Haub, C., & Willette, J. (1983). U.S. Hispanics: Changing the Face of America. Population Bulletin, 38(3), 1-44.

Del Castillo, A.R., & Torres, M. (1988). The interdependency of educational institutions and cultural norms: The Hispano experience. Pp. 39-60 in T. McKenna & F.I. Ortiz (eds.) The Broken Web: The Educational Experience of Hispanic American Women. Claremont and Berkeley, CA.: The Tomas Rivera Center and Floricanto Press.

Duran, R.P. (1983). Hispanics' Education and Background: Predictors of College Achievement. New York: The College Board.

Flores, E.T. (1984). Research on undocumented immigrants and public policy: A study of the Texas school case. International Migration Review, 18(3), 505-523.

Furlong, John. (1984). Black resistance in the liberal comprehensive. In Sara Delamont, ed. Readings in Interaction in the Classroom. 2nd ed. London: Menthuen.

Freidenberg, J., Imperiale, C. Skovron, M.L. (198x). Migrant careers and well-being of women. International Migration Review, 22(2), 208-225.

Fernandez, R., & Velez, W. (1985). Race, color, and language in the changing public schools. In J.W. Moore & L.A. Maldonado,

eds. Urban Ethnicity in the United States: New Immigrants and Old Minorities. Beverly Hills, CA: Sage. Urban Affairs Annual Review 29, 123-43.

Glazer, N. (1977). Japanese-Americans. In M. Gold, C. Grant & H. Rivlin (Ed.). In praise of diversity: A resource book for multicultural education. Washington, D.C.: Multicultural Education Publication.

Garcia, M. T. (1989). Mexican Americans: Leadership, ideology, and identity, 1930-1960. New Haven: Yale University Press.

Gardner, R.W., Robey, B., & Smith, P.C. (1985). Asian Americans: growth, change and diversity. Population Bulletin, 40(4), 1-44.

Gibson, M.A. (1988). Accommodation without Assimilation: Punjabi Sikh Immigrants in an American High School and Community. Ithaca, NY: Cornell University Press.

Gupta, U. (1985). From other shores. In S. Anzovin (Ed.) The problem of immigration. New York: The H.W. Wilson Company.

Hacker, Andrew. (1989). Affirmative action: The new look. The New York Review of Books, October 12, 1989.

Hanushek, E.A., & Jackson, J.E. (1977). Statistical methods for social scientists. Orlando, Florida: Academic Press, Inc.

Harwood, E. (1986). American public opinion and U.S. Immigration policy. ANNALS, AAPSS, 487(Sept), 202-212.

Hassan, T.E. (1986-1987, Winter). Asian-American admissions: Debating discrimination. The College Board Review, p. 18-

21, 42-45.

Hill, J. (1906). Illiteracy. Twelfth Census of the United States: 1900. Washington, DC: U.S. Bureau of Census.

Hirschman, C., & Wong, M.G. (1986). The extraordinary educational attainment of Asian Americans: A search for historical evidence and explanations. Social Forces, 65, 1-27.

Kallarackal, A., & Herbert, M. (1976). The happiness of Indian immigrant children. New Society, 35(698), 422-424.

Kan, S., & Liu, W. (1986). The educational status of Asian Americans: An update from the 1980 census. Pp. 1-12 in N. Tsuchiya (ed.) Issues in Asian and Pacific Education. Minneapolis: Asian/Pacific American Learning Resource Center.

Kikaldy, J. (1975). Immigrants dispel myth of excellence. Times Educational Supplementary. July 18, p12.

Lee, E.S., & Rong, X.L. (1988). The educational and economic achievement of Asian Americans. The Elementary School Journal, 88(5), 545-60.

Lee, Valerie. (1988). Achievement and educational aspirations among Hispanic female high school students: Comparisons between public and Catholic schools. Pp. 137-92 in T. McKenna & F.I. Ortiz (eds.). The Broken Web: The Educational Experience of Hispanic American Women. Claremont and Berkeley, CA.: The Tomas Rivera Center and Floricanto Press.

Lieberson, S. (1980). A Piece of the Pie: Black and White

Immigrants Since 1880. Berkeley: University of California Press.

Matute-Bianchi, M.E. (1986). Ethnic identities and patterns of school success and failure among Mexican-descent and Japanese-American students in a California high school: an ethnographic analysis. American Journal of Education, 233-255.

McKenna, T., & Ortiz, F.I. (1988). The Broken Web: The Educational Experience of Hispanic American Women. Claremont and Berkeley, CA: The Tomas Rivera Center and Floricanto Press.

Model, S. (1988). The economic progress of European and East Asian Americans. Annual Review of Sociology, 14, 363-380.

Moore, D.D. (1981). At home in America. New York: Columbia University Press.

Neidert, L. & Farley, R. (1985). Assimilation in the United States: An analysis of ethnic and generation differences in status and achievement. American Sociological Review, 50(6), 840-850.

North, D. (1979). Seven Years Later: The experiences of the 1970 cohort of immigrants in the United States, B. and D. Monograph. 71. Washington, DC: Department of Labor.

Pedraza-Bailey, S. (1985). Political and Economic Migrants in America: Cubans and Mexicans. Austin: University of Texas Press.

Nuyen-Hong-Nhiem, L., & Halpern, J.M. (1989). The Far East Comes

Near: Autobiographical Accounts of Southeast Asian Students. Amherst, MA: University of Massachusetts Press.

Ogbu, J.U. (1988). Cultural boundaries and minority youth orientation toward work preparation. In D. Stern & D. Eichorn (eds.) Adolescents and Work: The Influence of Social Structure, Labor Markets, and Culture. Hillsdale, NJ: Erlbaum.

Ogbu, J.U. (1987a). Variability in minority responses to schooling: Nonimmigrants vs. immigrants. In G. Spindler & Spindler (Ed), Interpretive Ethnography of Education at Home and Abroad. 255-278.

Ogbu, J.U. (1987b). Variability in minority school performance: A problem in search of an explanation. Anthropology & Education Quarterly, 18, 313-334.

Ogbu, J. (1978). Minority Education and Caste. New York: Academic Press.

Orfield, G.R. (1986). Hispanic education: Challenges, research, and policies. American Journal of Education, 95, 1-25.

Passel, J.S., & Karen, W.A. (1984). Geographic distribution of undocumented immigrants: Estimates of undocumented aliens counted in the 1980 census by state. International Migration Review, 18(3), 642-671.

Pedrata-Bouley, S. (1985). Mexican Americans. Austin: University of Texas Press.

Rist, M.C. (1987). This immigrant wave will test your schools as never before. The Executive Educator, 9(1), 14-17.

Rong, X.L. (1988). Immigration and education in the United States: 1880-1980. Unpublished dissertation, Educational Research Laboratory, University of Georgia, Athens, GA.

Rong, X.L. & Grant, L.M. (1990, April). The educational achievement of children of immigrants. Paper presented at the meeting of the American Educational Research Association, Boston.

Rong, X.L. & Goetz, J.P. (1990, April). High school drop-outs among foreign-born whites, Hispanics and Asians. Paper presented at the meeting of the American Educational Research Association, Boston.

Roos, P., & Hennessey, J. (1987). Assimilation or exclusion? Japanese and Mexican Americans in California. Sociological Forum, 2, 278-304.

Shibutani, T. & Kwan, K. (1965). Ethnic stratification: A comparative approach. New York: Macmillian.

Simon, J. (1985). Don't close our borders. In S. Anzovin (Ed.) The problem of immigration. New York: The H.W. Wilson Company.

So, A.Y. (1987). The educational aspirations of Hispanic parents. Educational Research Quarterly, 11(3), 47-53.

Steinberg, L., Blinde, L. P., & Chan, S. K. (1984). Dropping out among language minority youth. Review of Educational Research, 54(1), 113-132.

Stevenson, H.W. (1088). Cross-cultural studies of parental influence on children's achievement. Human Development, 31, 349-50.

Suarez-Orozco, M.M. (1987a). 'Becoming somebody.': Central American immigrants in U.S. inner-city schools. Anthropology and Education Quarterly, 18 , 287- 299.

Suarez-Orozco. M.M. (1987b). Hispanic Americans: Comparative considerations and the educational problems of children. International Migration Review, 25, 141-63.

Tienda, M., & Lii, D.T. (1987). Minority concentrations and earnings inequality: Blacks, Hispanics, and Asians compared. American Journal of Sociology, 93, 141-65.

U.S. Bureau of the Census. (1989). Statistical Abstract of the United States 1989. Washington, DC: U.S. Government Printing Office.

U.S. Bureau of the Census. (1981). Current population survey: Public Use Tape File. Washington, D.C.

U.S. Bureau of the Census. (1953). Special Report. Washington, DC: U.S.Government Printing Office.

U.S. Department of Education. (1988). Digest of Educational Statistics. Washington, DC: Government Printing Office.

Valverde, S. (1987). A comparative study of Hispanic high school dropouts and graduates: why do some leave school early and some finish? Education and Urban Society, 19(3), 320-329.

Velez, W. (1989). High school attrition among Hispanic and Non-Hispanic White Youth. Sociology of Education, 62, 119-33.

Velez, W. (1988). Why Hispanic students fail: factors affecting attrition in high school. Pp. 380-388 in J.H. Ballantine (ed.) Schools and Society. 2nd ed. Mountain View, CA: Mayfield.

Wang, L.L. (1988). Meritocracy and diversity in higher education: Discrimination against Asian Americans in the post-Bakke era. Urban Review, 20, 189-209.

Willis, P. (1977). Learning to Labor. Lexington, MA: D.C. Heath. Sociological Perspectives, 26(4), 423-446.

Wong, M. (1986). Post-1965 Asian Immigrants: where do they come from, where are they now, and where are they going? Annals, Aapss, 487 (Sep), 150-168.

Wolfle, D. (1971). The uses of talent. Princeton, New Jersey: Princeton University Press.

Table 1

Percentages of non-Hispanic white, Hispanic and Asian youth ages 14-24, by generational status, in the 1979 U.S. Census sample

		Immigrants	Children of Immigrants	Natives
White	%	2.5%	5.3%	92.3%
	N	509	1087	19037
Hispanic	%	29.7%	27.4%	43.0%
	N	499	460	722
Asian	%	50.1%	23.6%	26.2%
	N	191	90	100

Note. Based on data assembled from the U.S. Bureau of the Census, 1981.

Table 2

Mean ages of non-Hispanic white, Hispanic and Asian youth ages 14-24, by generational status, in the 1979 U.S. Census sample

	Immigrants	Children of Immigrants	Natives
White	19.2	18.9	18.9
Hispanic	19.5	18.2	18.9
Asian	19.0	18.3	18.6

Note. Based on data assembled from the U.S. Bureau of the Census, 1981.

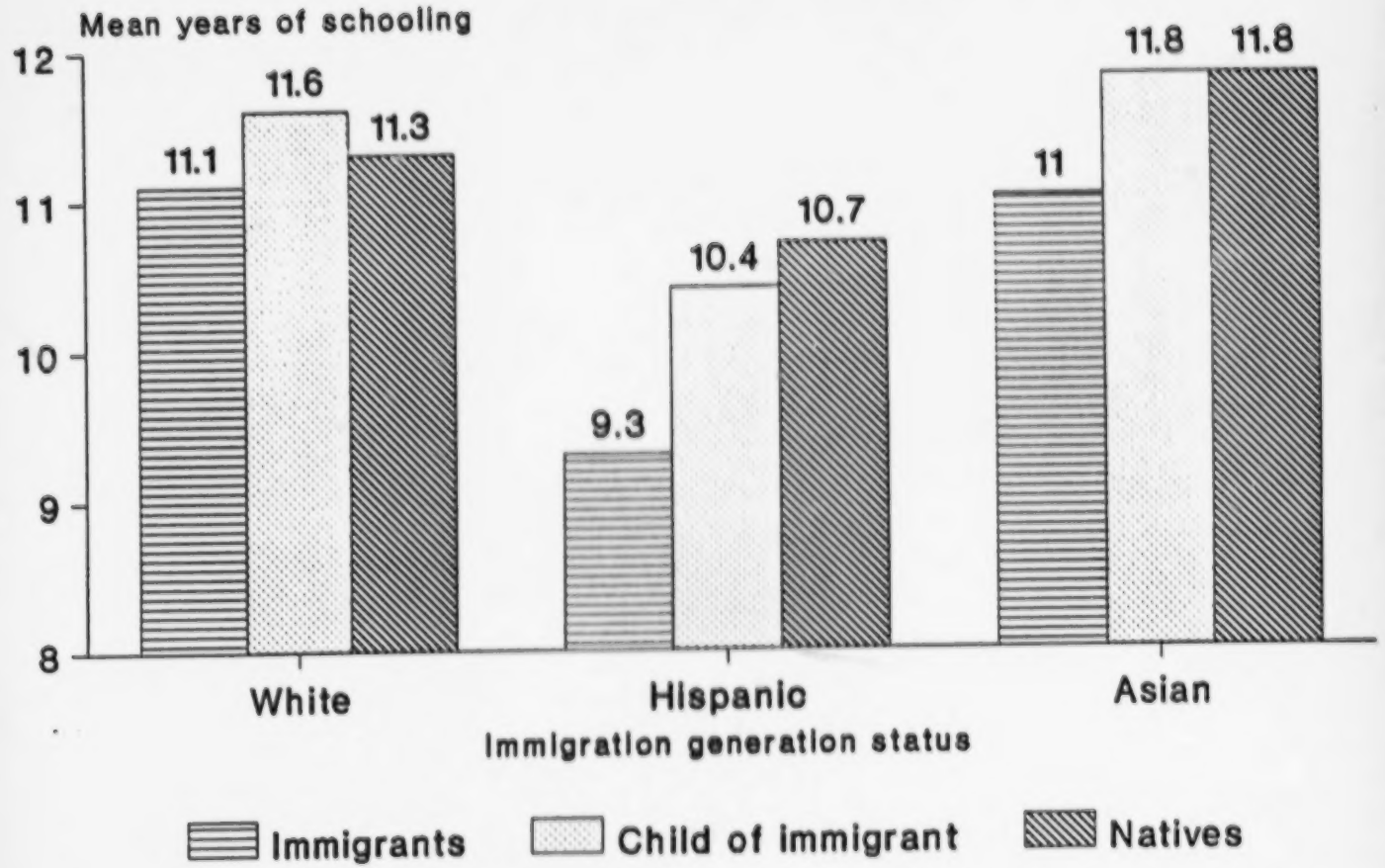
Table 3

Age adjusted mean schooling years, percentages completing 8 years of schooling, percentages completing high school, and percentages completing four years of college by ethnicity and generational status for youth ages 14-24, in the 1979 U.S. Census sample

generations		All generations	Immigrants	Children of immigrants	Natives
Mean schooling years (ages 14-24)					
Total		11.2	10.2	11.3	11.3
	N	(22695)	(1199)	(1637)	(19859)
White		11.29	11.1	11.6	11.3
	N	(20633)	(509)	(1087)	(19037)
Hispanic		10.1	9.3	10.4	10.7
	N	(1681)	(499)	(460)	(722)
Asian		11.36	11.0	11.8	11.8
	N	(381)	(191)	(90)	(100)
Percentages completing eight years of grammar school (ages 14-24)					
Total		96.6%	84.8%	96.1%	97.3%
	N	(22695)	(1199)	(1637)	(19859)
White		97.3%	92.7%	97.8%	97.4%
	N	(20633)	(509)	(1087)	(19037)
Hispanic		87.6%	74.1%	91.7%	95.1%
	N	(1681)	(499)	(460)	(722)
Asian		96.0%	92.5%	98.3%	100.0%
	N	(381)	(191)	(90)	(100)
Percentages completing high school (ages 16-24)					
Total		64.6%	50.4%	64.5%	65.5%
	N	(18532)	(1005)	(1286)	(16239)
White		65.2%	64.7%	69.3%	65.9%
	N	(16877)	(426)	(879)	(15572)
Hispanics		46.4%	33.1%	49.8%	55.3%
	N	(1354)	(425)	(339)	(590)
Asian		66.1%	59%	73.4%	73.1%
	N	(301)	(154)	(68)	(77)
Percentages completing four years of college (ages 20-24)					
Total		10.7%	7.5%	12.6%	10.7%
	N	(10038)	(581)	(664)	(8793)
Hispanic		2.5%	2.3%	3.9%	2.0%
	N	(711)	(251)	(152)	(308)
Asian		14.3%	15.5%	12.6%	14.0%
	N	(159)	(87)	(32)	(40)

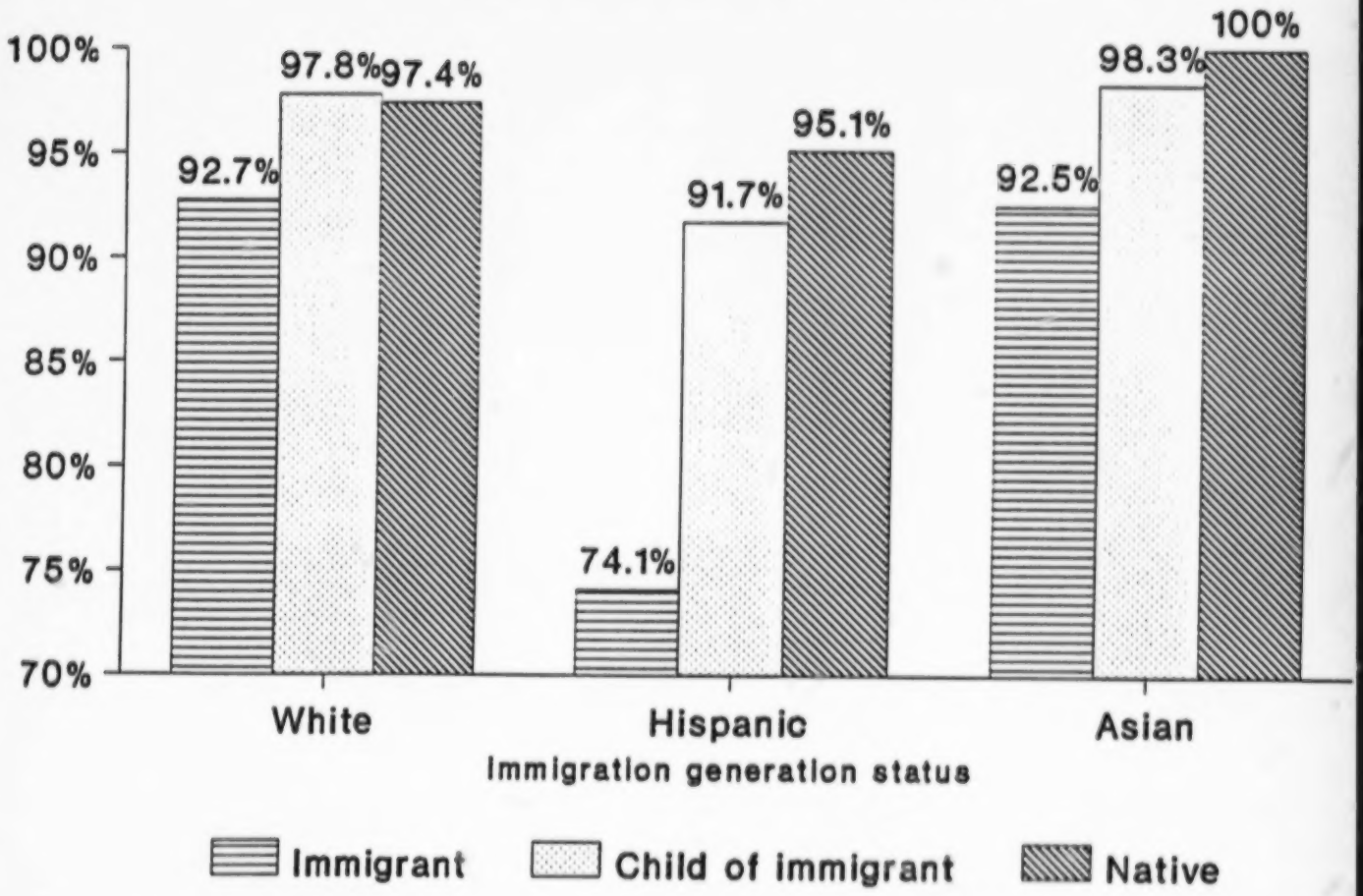
Note. Based on data assembled from the U.S. Bureau of the Census (1981).

Figure A. Mean years of schooling (age-adjusted) for youth 14-24 by generation, and ethnicity, U.S., 1979.



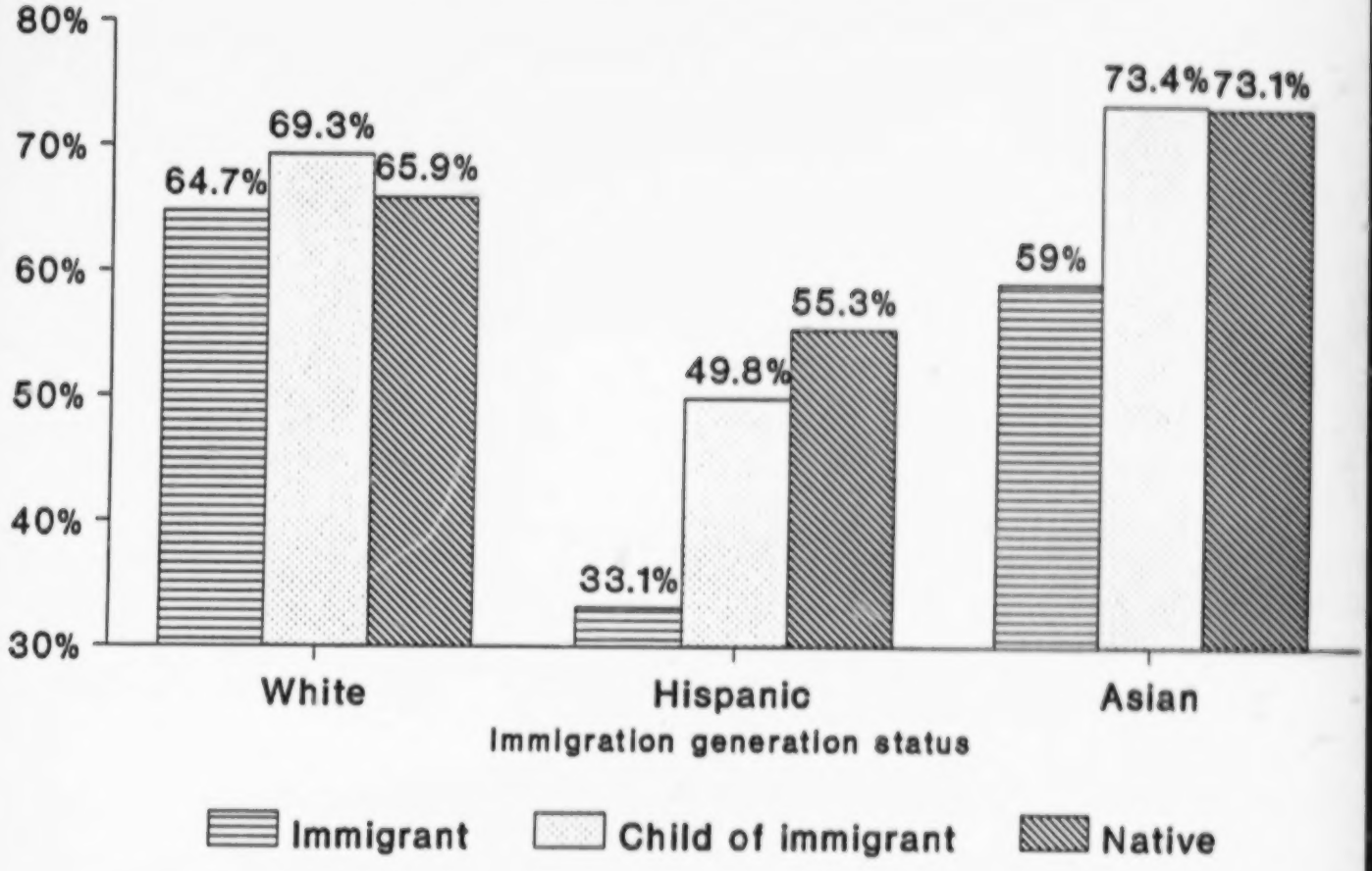
Source: Based on data assembled from the U.S. Bureau of Census, 1981.

Figure B. Percentage of 8 year school completion (age-adjusted) for Youth 14-24 by generation and ethnicity.



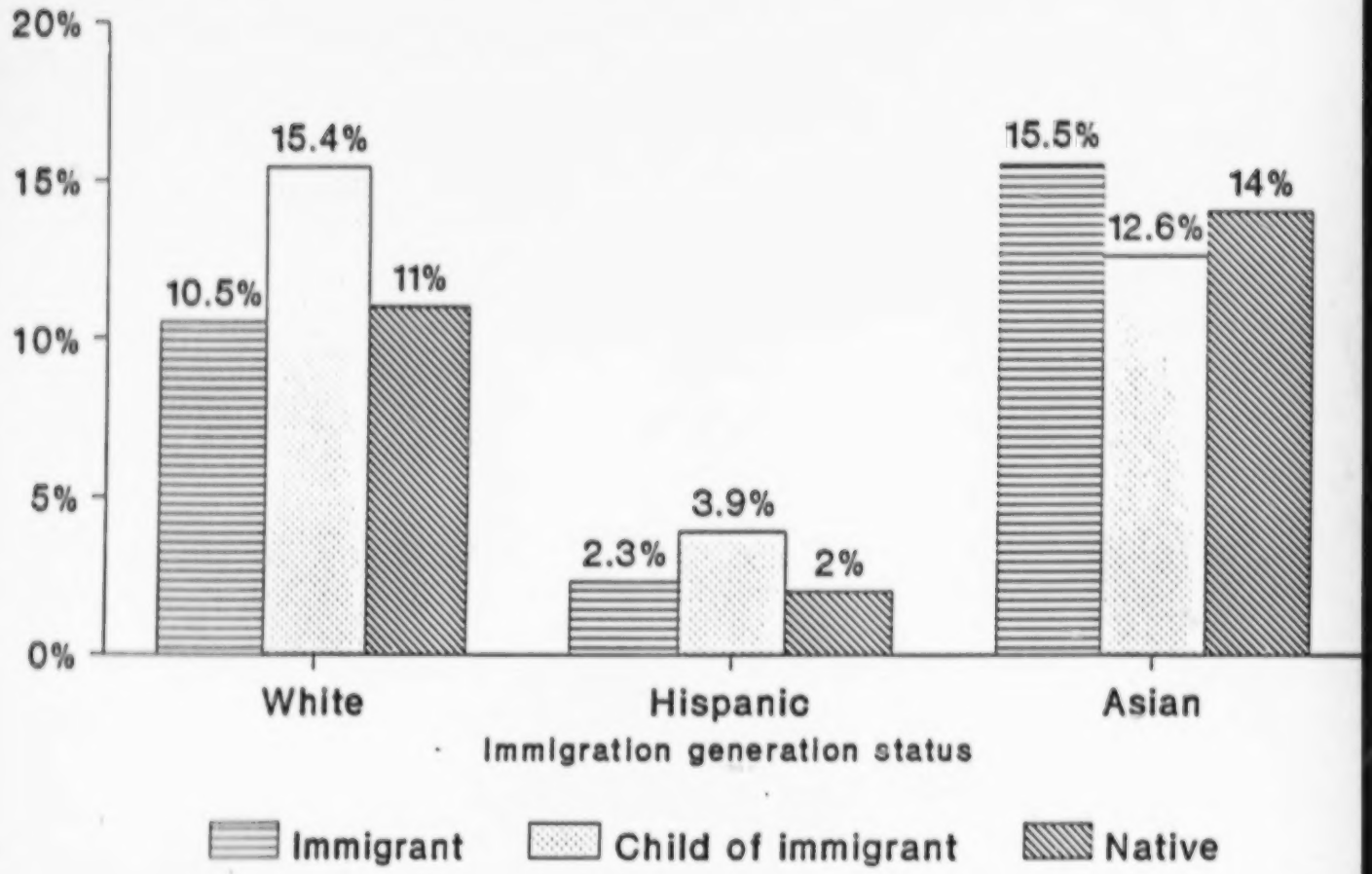
Source: Based on data assembled from the U.S. Bureau of the Census, 1981.

Figure C. Percentage of high school completion (age-adjusted) for Youth 16-24 by generation and ethnicity.



Source: Based on data assembled from the U.S. Bureau of the Census, 1981.

Figure D. Percentage of college completion (age-adjusted) for youth 20-24 by generation and ethnicity.



Source: Based on data assembled from the U.S. Bureau of the Census, 1981.

Table 4

Multiple regressions predicting total schooling years for whites, Hispanics and Asians by immigrant generation

	Unstandardized coefficients (b)			Standardized coefficients (B)		
Independent Variables						
	Whites	Hispanics	Asians	Whites	Hispanics	Asians
[a]Immigrant vs. Child of Immigrant	-.47**	-1.38**	-0.75**	-.032	-0.24	-.14
[b]Native vs. Child of Immigrant	-.25**	0.29*	-0.01	-.029	0.04	-.00
Age	0.53**	0.32**	0.56**	0.72	0.36	0.66
R-Square	0.52	0.19	0.44			
F	7510.84	132.21	96.94			
Prob>F	0.0001	0.0001	0.0001			

Note. Based on data from the U.S. Bureau of the Census (1981).
** Significant at P<=.01.
* Significant at .01<P<=.05.
[a] coded 1=immigrants, 0=Other(children of immigrants and natives).
[b] coded 1=natives, 0=Other (children of immigrants and immigrants).

Table 5

Logistic regressions predicting completion of grammar school and high school among whites, Hispanics and Asians by immigrant generation

B Logistic regression coefficients			
	White	Hispanic	Asian
Completion of grammar school, aged 14-24			
Independent variables			
[a]Immigrant vs. Child of Immigrant	-1.42**	-1.34**	-1.39*
[b]Native vs. Child of Immigrant	-0.19**	0.68**	[c]
Age	0.57**	0.06*	0.20*
Chi-Square	915.8	131.1	18.6
Prob>Chi-Square:	0.00001	0.00001	0.0003
N	20633	1681	381
Completion of high school, aged 16-24			
[a]Immigrant vs. Child of Immigrant	-0.34*	-0.93**	-1.07**
[b]Native vs. Child of Immigrant	-0.24**	0.25*	-0.08
Age	0.69**	0.34**	0.71**
Chi-Square	6995.2	247.96	135.51
Prob>Chi-Square:	0.00001	0.00001	0.00001
N	16877	1354	301

Note. Based on data from the U.S. Bureau of the Census (1981).
** Significant at P<=.01.
* Significant at .01<P<=.05.
[a] coded 1=immigrants, 0=Other(children of immigrants and natives).
[b] coded 1=natives, 0=Other (children of immigrants and immigrants).
[c] dependent variable fall into a particular category has no variation.